- 17 -

#### CLAIMS:

- 1. A method for displaying results of a computer aided detection (CAD) analysis of a digital image, the method comprising:
  - i) analyzing the digital image using CAD analysis to identify one or more CAD-detected abnormalities;
  - ii) generating one or more coded descriptors for said CAD-detected abnormalities wherein said coded descriptors provide information on one or more criteria used by said CAD analysis to identify said CAD-detected abnormalities; and
  - iii) displaying said digital image with the one or more coded descriptors.
- 2. The method as claimed in claim 1 wherein said digital image is a digitized image of an X-ray film.
- The method as claimed in claim 1 wherein said digital image is a digital mammogram.
- 4. The method as claimed in any one of claim 1 to 3 further comprising visually analyzing said digital image to identify one or more user-detected abnormalities, said visual analysis being performed before said step of displaying and wherein said user-detected abnormalities are re-assessed based on said information provided by said coded descriptors.

- 5. The method as claimed in claim 4 wherein said digital image is a digitized image of an X-ray film and wherein said visual examination is performed on said X-ray film.
- The method as claimed in any one of claim 1 to 3 6. further comprising visually analyzing said digital identify one or more user-detected image to abnormalities said visual examination being performed with said coded descriptors displayed simultaneously such that a user can refer to said coded descriptors while performing said visual analysis.
- 7. The method as claimed in claim 6 wherein said digital image is a digitized image of an X-ray film and wherein said visual examination is performed on said X-ray film.
- 8. The method as claimed in claim 1 wherein said one or more coded descriptor displayed in the image is selected by a user.
- 9. The method as claimed in any one of claim 1 to 8 wherein said coded descriptors also provide information on probability that said CAD-detected abnormalities are indicative of a disease state.
- 10. The method as claimed in anyone of claim 1 to 9 wherein said one or more coded descriptors is selected from visual markers, alpha-numeric information or a combination thereof.

- 11. The method as claimed in claim 10 wherein the alpha-numeric information is based on Breast Imaging Reporting and Data System (BI-RADS).
- 12. The method as claimed in claim 10 wherein said alpha-numeric information is a sentence describing in medical terms said CAD-detected abnormalities.
- 13. The method as claimed in claim 10 wherein said visual markers comprise border delineations of regions.
- 14. The method as claimed in claim 10 wherein said visual markers comprise one or more highlighted feature used by CAD for determining likelihood of abnormality.
- 15. The method as claimed in claim 14 wherein said highlighted feature is selected from size, brightness, location, density, number and length of spicules.
- 16. The method as claimed in claim 14 wherein said highlighted feature comprise individual calcifications within a micro-calcification cluster.
- 17. The method as claimed in claim 10 wherein said visual markers are color coded according to said probability that the CAD-detected abnormalities are indicative of a disease state.
- 18. The method as claimed in claim 17 wherein said visual markers are of a same color and wherein a

- level of probability is indicated by a predetermined shade of said same color.
- 19. The method as claimed in claim 10 wherein said visual markers can be displayed with varying degrees transparency.
- 20. The method as claimed in claim 19 wherein said degrees of transparency to display the visual markers vary dynamically.
- 21. A method for identifying abnormalities in a mammogram the method comprising:
  - i) analyzing said mammogram using Computer Aided Detection (CAD) analysis to produce CAD results;
  - ii) displaying said mammogram and a corresponding image of said mammogram comprising said CAD results:
  - iii) visually analyzing said mammogram to identify one or more user-detected abnormalities said visual examination being performed with said corresponding image of said mammogram comprising CAD results being displayed simultaneously such that a user can refer to said CAD results while performing said visual analysis:
- 22. The method as claimed in claim 21 wherein said mammogram is a digitized X-ray film.

- 23. The method as claimed in claim 21 wherein said mammogram is a digital mammogram.
- 24. A system for displaying results of a computer aided detection (CAD) analysis of a digital image said system comprising:
  - a digital image source;
  - a processor for analyzing said digital image using CAD analysis to identify CAD-detected abnormalities;
  - a processor for extracting criteria used in said identification of CAD-detected abnormalities;
  - a processor for associating coded descriptors with said criteria and said abnormalities;
  - a display for displaying said digital image and said coded descriptors.
- 25. The system as claimed in claim 24 wherein said display comprises more than one display area.
- The system as claimed in claim 25 wherein a digital image is displayed in a first display area without coded descriptors and said digital image is displayed in a second display area with coded descriptors.
- 27. The system as claimed in any one of claim 24-26 further comprising a means for displaying an analog X-ray film.